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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,056	08/26/2003	Jeff R. Justis	MSDI-77/PC753.00	2957
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KRIEG DEVAULT LLP ONE INDIANA SQUARE, SUITE 2800 INDIANAPOLIS, IN 46204-2709			EXAMINER STEWART, ALVIN J	
			ART UNIT	PAPER NUMBER
			3738	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/648,056

Applicant(s)

JUSTIS ET AL.

Examiner

Alvin J. Stewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5, 7, 11-14, 44, 45, 47, 51-56 and 60-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7, 11-14, 44, 45, 47, 51-56, 60-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 07/13/07 have been fully considered but they are not persuasive.

Regarding the Kuslich reference, the Examiner still believes that the prior art still reads on the new limitations. For example, Kuslich discloses, in paragraph 97, patent 5,549,679, as being incorporated by reference, a list of the materials used in the implant. The reference discloses a combination of materials that can be morselized bone graft or substitutes and bone inducing substances (see US 5,549,679 col. 12, lines 15-23).

The Examiner interpreted the plurality of reduction members as elements (108 and the morselized bone graft in col. 12, line 15 of US 5,549,679) and the bone inducing substances as the means for rigidly fixing the elements.

Regarding the Baumgartner and Trieu references, the Examiner still believes that the 103 rejection is still proper and reads on all the structure limitations of the claims. For example, the filling material that rigidly fix the reduction elements in engagement with one another is disclosed in the Trieu reference. Trieu discloses an anchoring outer shell made of a variety of biocompatible materials for the purpose of anchoring the implant within the disk and fill all the open voids in the implant. For the above reasons the examiner believes that the previous rejection is proper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 44, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuslich US Patent 5,571,189.

Kuslich discloses an intervertebral reduction system comprising a plurality of reduction elements (chopped conical or cancellous bone chips (see col. 9, lines 55-58) positionable in an intervertebral space adjacent one another and means for rigidly fixing the reduction elements with one another (see paragraph 97 disclosing US Patent 5,549,679 disclosing the reference as being incorporated by reference. US Patent 5,549,679 clearly disclose a combination of materials being inserted into the implant, see col. 12, lines 15-23).

The Examiner interpreted the voids as the spaces between each chopped bone and the material filling the voids have been interpreted as the other materials used to made fluidable material (see col. 12, lines 10-22). US Patent 5,571,189 clearly discloses in col. 12, lines 10-22 that the material use to prepare the graft medium can be made of one material or more materials. Therefore, the Examiner has interpreted the graft medium capable of been used by a plurality of different materials, such as, the first material (the plurality of reduction elements) (the morselized bone graft) and the second material (material filling the voids) (any bone graft

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substitute (e.g. hydroxyapatite)). Therefore, by having the combination of having two or more materials the prior art reads on the broad limitations of the independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 7, 11-14, 44, 45, 47, 51-56, 60-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner US Patent 5,755,797 in view of Trieu US Patent 6,620,196 B1.

Baumgartner discloses an intervertebral reduction system comprising a plurality of reduction elements positionable in an intervertebral space adjacent one another, the elements include a spherical shape, an exterior surface and a cavity extending through the reduction element. However, Baumgartner does not disclose a material filling the voids and the reduction elements made of PMMA.

Trieu teaches an implant core (15) inserted within the vertebral disc having upper, lower, and lateral voids surrounding the implant, wherein an outer shell (30) fills in the voids for the purpose of anchoring and fixing in place by the outer shell (see col. 5, lines 20-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Baumgartner reference with the outer shell of the Trieu reference in order to anchor and fix in place the outer shell.

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Regarding claims 6, 46 and 57, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the material property of the Baumgartner reference because Applicant has not disclosed that the PMMA material provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the polyethylene material of the Baumgartner reference because the material is capable of absorbing the forces exerted in the body and they are biocompatible.

Therefore, it would have been an obvious matter of design choice to modify the Baumgartner reference to obtain the invention as specified in claims 6 and 46.

Regarding claims 12, 13, 52, 53, 60, 62 and 63, Trieu teaches an intervertebral implant comprising a reduction element (15) covered by a material placeable (30) in the intervertebral space around the reduction element for the purpose of anchoring the implant to the wall of the vertebral body and avoid the expulsion of the implant from the disc cavity, promote the growth of fibrous tissue and provide mechanical support to the disc (see col. 5, lines 20-67; col. 6, lines 62-67; and col. 7, lines 1-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Baumgartner reference with the material placeable in the intervertebral space around the implant in order to anchor the implant to the wall of the vertebral body and avoid the expulsion of the implant from the disc cavity, promote the growth of fibrous tissue and provide mechanical support to the disc.

Regarding claims 13, 53 and 63, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the material property of the Trieu reference

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because Applicant has not disclosed that the PMMA material provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the plurality of polymeric materials disclosed in the Trieu reference because the material is capable of being bioabsorbable, absorb the forces exerted in the implant and anchor the implant to the disc cavity.

Therefore, it would have been an obvious matter of design choice to modify the Trieu reference to obtain the invention as specified in claims 13, 53 and 63.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a):

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J. Stewart whose telephone number is 571-272-4760. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Stewart
ALVIN J. STEWART
PRIMARY EXAMINER
Art Unit 3738

September 24, 2007.